



# **CDF Operations Report**

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**All Experimenter's Meeting  
July 31, 2006**

# CDF Store Summary (July 24 – 31, 2006)

Store	Start Date	Time [hrs]	Uptime [hrs]	Ini.lumin [E30]	Tot. Del. Lumin. [pb <sup>-1</sup> ]	Live Lumin. [pb <sup>-1</sup> ]	Comments
4851 Normal	07/23 Sun	40.4	38.2	179.5	8.2	7.1 87.1%	2.7 pb <sup>-1</sup> collected data in one shift
4857 Normal	07/25 Tue	26.1	20.2	144.3	4.9	3.3 67.0%	Recovery from the power outage
4859 Normal	07/27 Thu	45.5	42.7	181.8	8.9	7.6 85.9%	Plug HV problems at the start
4862 Normal	07/29 Sat	<i>Store in progress</i>					Silicon cooling system failure
<b>Total</b>	07/24-31	<b>112.0</b>	<b>101.1</b> 90.3%		<b>22.0</b>	<b>18.0</b> 82%	

# System News

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Unexpected power outage during the controlled access on July 25. Details on next page.

- Silicon Vertex Detector (SVX)

- Detailed post-power outage test was performed, detector is OK
- SVX radiation and integrated dose alarms before beam was injected
- Silicon cooling system trips (2) possibly due to the humidity sensor on east side of detector. We need to change the interlock code (**Done**), detector is off.

- Muon System

- Oscillating segments in Barrel Muon Upgrade (BMU) counters on West side
- High rate of muon trigger in Central Muon Extension (CMX) were understood and fixed

- Central Outer Tracker (COT)

- One single TDC to be replaced

# Recovering from the power outage

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## Unexpected (~ 3 hrs) power outage

- Silicon cooling problems, spare chiller backup pumps were plugged in
- Several CMX and BMU HV trips
- Hot channel appeared in plug shower max detector
- Trigger electronics failure, problems with L1
- High L2 and CMX trigger rates
- Crate power supply failure
- Several done timeouts from CLC
- Clock problems

Normal data taking was resumed at 9pm of July 26<sup>th</sup>, store 4857 basically was devoted to find all related to the power outage problems

# Access Report

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July 25, Tuesday (before and after the power outage)

- Muon System

- One dead channel was fixed on top of the Central Muon Upgrade (CMP)
- Central Muon Extension (CMX) chambers were investigated on west to track down and the tripping segment

- Calorimeters

- HV module and front end electronic card (CAFE) were replaced on plug calorimeter
- Two EM timing channels were repaired
- One of the Calorimeter crate CPU was replaced

- SVX

- Regular maintenance

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## July 27, Thursday

- Muon System
  - Oscillating channels were fixed in Barrel Muon Upgrade (BMU) chambers on North West

## July 29, Saturday

- Calorimeters
  - Broken HV cable fixed on Central Hadron Calorimeter
  - Several ADMEM and FE electronic cards (CAFE) were found with a blown fuse
  - Problematic channel was fixed on west of Plug Pre-Radiator (PPR)
  - Crate processor was replaced on Central Calorimeter
- Cherenkov Luminosity Counters (CLC)
  - PMT Stability check was done on west
- SVX
  - Regular maintenance

# Run II Integrated Luminosity

